



May 2006

2005 Annual Report

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Costs Continue to Escalate

The costs associated with road and bridge maintenance and construction continued to climb in 2005. Significant increases are also being seen on products and services this year. Continuing increases in costs coupled with a flat revenue stream place an increasing strain on the budgeting process and consequently potentially threaten the service level that can be delivered. It is our goal to spend the available funds prudently in an attempt to preserve the existing roadway system in Clark County. The above stated goal is limited only by the knowledge that it is wise to carry a certain amount of funds to cover unexpected infrastructure costs (i.e., rainy day fund).

Despite these ongoing challenges, the Engineer's office is committed to providing the best quality service and infrastructure possible for the traveling public.

Examples of typical costs incurred by the Engineer's office are listed below:

<u>Item</u> <u>Road Salt</u>			<u>Item</u> <u>36" Reinforced Concrete Pipe</u>		
<u>Year</u>	<u>Unit Cost</u>	<u>Increase</u>	<u>Year</u>	<u>Unit Cost</u>	<u>Increase</u>
2005	\$ 37.27/ ton	12.3%	2005	\$ 43.65	15.8%
2004	\$ 33.20/ ton		2004	\$ 37.70	

Asphalt Resurfacing Project — 2005

The Clark County Engineer received bids for asphalt resurfacing on May 13, 2005. Bids were received from A&B Asphalt Corporation, The Shelly Company, and Barrett Paving Materials Incorporated. The low bid was submitted by A&B Asphalt at a price of \$1,361,788.05. As has been common for the past several years, the bid work involved asphalt resurfacing on various county and township roads. In addition to Clark County, Bethel Township, German Township, Harmony Township, Moorefield Township, Springfield Township, and the Village of Donnelsville were included in the project. Typical quantities and bids received were:

Item 448—Asphalt Concrete, Type I Surface—8,333 tons @ \$32.90 per ton.

Item 442—Chip Seal with Polymer Binder—22,084 S.Y. @ \$0.92 per S.Y.

The final cost of asphalt resurfacing work on county maintained roadways in 2005 was \$494,869.54

Logjam Removal - Mad River off Old Lower Valley Pike

Pursuant to authorization by the Clark County Commissioners (Resolution 60-05), engineer's crews removed a logjam on Mad River near Old Lower Valley Pike. The logjam created a significant restriction to river flows and created a danger to county roadways. The removal entailed numerous man-hours and numerous hours of both owned and rented equipment. A serious impediment to Mad River flows was removed by this work.



Guardrail Replacement Project—Phase I

The Clark County Engineer sought and obtained federal safety funding to replace deteriorated guardrail on several sections of county roads. Project bids were received in early 2005 and PDK Construction, Inc. was awarded the work at the bid price of \$203,034.45. The project was constructed early in the year and included work on Moorefield Road, Old Clifton Road, Selma Pike, and Rebert Pike.

A sample of work items with bid quantity and price is as follows:

Item 606 -Guardrail, Type 5, as per plan 14,790 LF @ \$11.18 per foot.

Item 606-Anchor Assembly, Type A– 20 each @ \$675.00

Item 606–Anchor Assembly, Type T– 11 each @ \$520.00

Item Special– Barrier Reflector, Type A– 215 each @ \$4.25



New guardrail—Selma Pike

Lower Valley Pike—Enon Road Intersection



Lower Valley Pike approaching Enon Road after implementing 4-way stop.

A four way stop condition with advance signage, rumble strips and overhead flashing red beacons was installed in March of 2005.

The following press release was issued at that time:

PRESS RELEASE

Clark County Engineer, Bruce C. Smith, is pleased to announce that as of 3 p.m., Friday, March 11, 2005, the four-way stop intersection at Lower Valley Pike and Enon Road is now operational.

In accordance with County Commission Resolution No. 179-05, the Board of County Commissioners authorized installation of stop signs and an overhead beacon at the Lower Valley Pike and Enon Road intersection, based upon accident analysis. The multiway stop is warranted and the overhead control beacon is recommended as a safety countermeasure.

Bird Road Improvement Project

The Bird Road project was constructed during the 2005 construction season. The project included total replacement of the Bird Road Bridge over Beaver Creek on a modified roadway alignment. The project was completed in a timely fashion through a Local Public Agency (LPA) agreement with the Ohio Department of Transportation. Clark County selected American Consulting, Inc. for Engineering Design on the project and DLZ Corporation was selected for construction management services.

Bids for construction of the improvement were received on April 15th, 2005. Seven bids were received for the project; Brumbaugh Construction Company, Inc, from Arcanum, Ohio was subsequently awarded a contract for the improvement for the amount of \$1,025,187.90. The improvement was funded utilizing federal funds for 80 percent of the costs. The first day of construction on the project was June 9, 2005. The roadway was closed to through traffic from July 12th until mid September. Final inspection was held on November 18, 2005.



Shrine Road Safety Improvement

A project to improve Shrine Road was completed in 2005. Bids were received for the improvement on July 1, 2005. The contract was awarded to Barrett Paving for the amount of \$273,475.13. The improvement was funded entirely with local MVGT funds.

The improvement closed the intersection at Shrine Road and Oakridge Drive and constructed a new roadway (Jurgens Way) that intersected Shrine Road downhill from the Oakridge intersection location. The project was undertaken to address safety issues associated with the intersection of Shrine Road and Oakridge Drive.



Shrine Road view from Oakridge Drive
Prior to Construction



Bridge 1072—Hilldale Road

The bridge crew performed major work on Bridge 1072 on Hilldale Road over Mill Run in Springfield Township. The existing bridge was constructed in 1962. Repairs were made to the existing substructure and the superstructure was totally replaced with pre-cast box beams. The box beams produced for this project were cast in advance of the work by our crews in our maintenance garage. Crews drove steel sheet piling and concrete protection in front of the existing abutments prior to setting the pre-cast box beams. Final asphalt pavement resurfacing improved the profile on Hilldale Road through the structure.



Chipseal Program

The following county road sections were chip sealed by Clark County Engineer's maintenance crews in 2005 at a total cost of \$220,337.27.

Road Name	From	To	Distance (Mi.)
Ballentine Pike	Addison Carlisle	Zerkle Road	6.34
Liberty Road	New Carlisle Pike	Black Pike	2.57
W. Jackson Road	Tecumseh Road	S.R. 72	4.14
S. Pitchin Road	N. River Road	Old Springfield Rd.	2.84
Craig Road	E. Pitchin Road	Old 70	1.64
Morris Road	Moorefield Road	County Line Road	2.02
Jones Road	Vernon—Asbury Rd.	S.R. 54	0.50
TOTAL			22.07

Bridge 810—Old Osborne Road

The images below are pictures of the previous and newly constructed Osborne Road Bridge. Bridge 810 on Osborne Road, in Harmony Township is located 1.54 miles east of State Route 54. The structure spans the south branch of Beaver Creek. The previous structure was constructed in 1938 and was a concrete slab bridge on concrete abutments. The new bridge is a 20 ft. long x 28 ft. wide precast concrete box structure. After the precast bridge sections were installed by the bridge crew, cast in place concrete wing walls were constructed and new guardrail with turn down terminal assemblies was installed. Minor re-channeling work was done on the stream and rip-rap was placed for erosion control. The total cost for county engineer's crews to reconstruct the bridge was \$72,992.



Stonecroft Culvert—Outlet Protection

Improvements were made to the outlet of a culvert on Stonebridge Drive in Beachwood Hills Subdivision in German Township. Bridge crew members protected the area at the outlet of the culvert from erosion by placing a large graded rock pad. Improvements were needed based upon the stormwater outlet velocity combined with erodable soils in the area.



Culvert Replacements

Clark County Engineer's maintenance crews replaced drainage culverts on the following county roads in 2005:

Rebert Pike

<u>Culvert Size</u>	<u>Quantity</u>
12" RCP	80'
15" CMP	
18" RCP	436'
21" RCP	40'
24" RCP	40'

South Hampton Road

<u>Culvert Size</u>	<u>Quantity</u>
18" CMP	
24" RCP	48'
38" x 60" HE	96'

Ayres Pike

<u>Culvert Size</u>	<u>Quantity</u>
15" RCP	32'
53" x 83" HE	48'

School Road

<u>Culvert Size</u>	<u>Quantity</u>
12" CMP	40'

Bowman Road

<u>Culvert Size</u>	<u>Quantity</u>
12" CMP	125'

Plattsburg Road

<u>Culvert Size</u>	<u>Quantity</u>
12" CPP	180'

W. Jackson Road

<u>Culvert Size</u>	<u>Quantity</u>
15" RCP	32'

Vernon Asbury Road

<u>Culvert Size</u>	<u>Quantity</u>
12" CMP	120'

Additional drainage work including construction of head-wall and drainage basins, ditching work in various locations and culvert work on township roads was also completed in 2005.

Crack Seal Operations

Maintenance work performed properly and in a timely fashion is instrumental to preserving the infrastructure investment.

Crack seal work was performed by county maintenance crews on the following Clark County roadways in 2005. The total cost of crack seal was \$63,843.

2005 Crack Seal

Columbus Avenue	\$ 4,740.11
Croft Road	\$ 4,313.03
Derr Road	\$ 1,468.56
E. Home Road	\$ 3,332.58
Old Columbus Road	\$19,141.73
Spangler Road	\$ 5,831.59
Plattsburg Road	\$10,898.96
Rebert Pike	\$ 4,063.11
Titus Road	\$ 7,033.22
Victory Safety Lane	<u>\$ 3,020.30</u>
TOTAL COST	\$63,843.18

Budget

Motor Vehicle & Gasoline Tax Fund

<i>Revenue:</i>	<i>2005</i>	<i>2004</i>
License Plates & Fees	\$2,897,621.12	\$2,766,221.45
Gasoline Tax	\$2,098,616.19	\$1,867,715.87
Dept. of Motor Vehicles	\$1,241,968.88	\$1,423,627.20
Traffic Fines	\$61,623.48	\$42,601.34
Sales & Reimbursements	\$364,168.84	\$336,847.06
<i>Totals*</i>	<u>\$6,663,998.51</u>	<u>\$6,437,012.92</u>
<i>Expenditures:</i>		
Salaries & Benefits:		
Office	\$416,634.10	\$413,519.38
Highways	\$2,104,781.25	\$1,969,850.84
Bridges	\$392,206.01	\$362,553.03
Maintenance:		
Equipment Purchases	\$331,412.02	\$324,234.65
Parts / Fuel	\$434,917.97	\$401,472.79
Road & Bridge Materials	\$815,588.50	\$696,291.85
Construction:		
Consultant Services	\$338,048.64	\$24,8112.14
Contractor Services	\$1,357,111.10	\$1,719,155.28
Right-of-Way Acquisition	\$68,425.20	\$36,054.00
New Carlisle Pike	\$187,706.26	\$265,925.32
Mahar Road	-	\$165,707.23
<i>Totals*</i>	<u>\$6,446,831.05</u>	<u>\$6,602,876.51</u>

*Grant funds are not included in these totals.
